Stage Designer™ 50
TFX-48B

Snapshot

Ok on Dimmer	⊘
Outdoor OK	⊘
Sound Activated	✓
DMX512	✓
Master/Slave	⊘
115V/230V Switch	⊘
Replaceable Fuse	⊘
User Serviceable	⊘
Duty Cycle	⊘

USER MANUAL

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1. BEFORE YOU BEGIN

What is included

- Stage Designer™ 50 controller
- DC 9-12V 500mA, 100-240v autoswitching
- Manual with warranty card

Unpacking Instructions

Immediately upon receiving a fixture, carefully unpack the carton, check the contents to ensure that all parts are present, and have been received in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

Safety Instructions

Please read these instructions carefully, which includes important information about the installation, usage and maintenance of your fixture.

- Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.
- Always make sure that you are connecting to the proper voltage and that the line voltage you are connecting to is not higher than that stated on decal or rear panel of the fixture.
- This product is intended for indoor use only!
- To prevent risk of fire or shock, do not expose fixture to rain or moisture. Make sure there are no flammable materials close to the unit while operating..
- In the event of serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.
- Don't connect the device to a dimmer pack.
- Make sure power cord is never crimped or damaged.
- Never disconnect power cord by pulling or tugging on the cord.
- Do not operate this device in more than 104°F (40°C) ambient temperature conditions.

Caution! ***There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact CHAUVET at: 954-929-1115.***

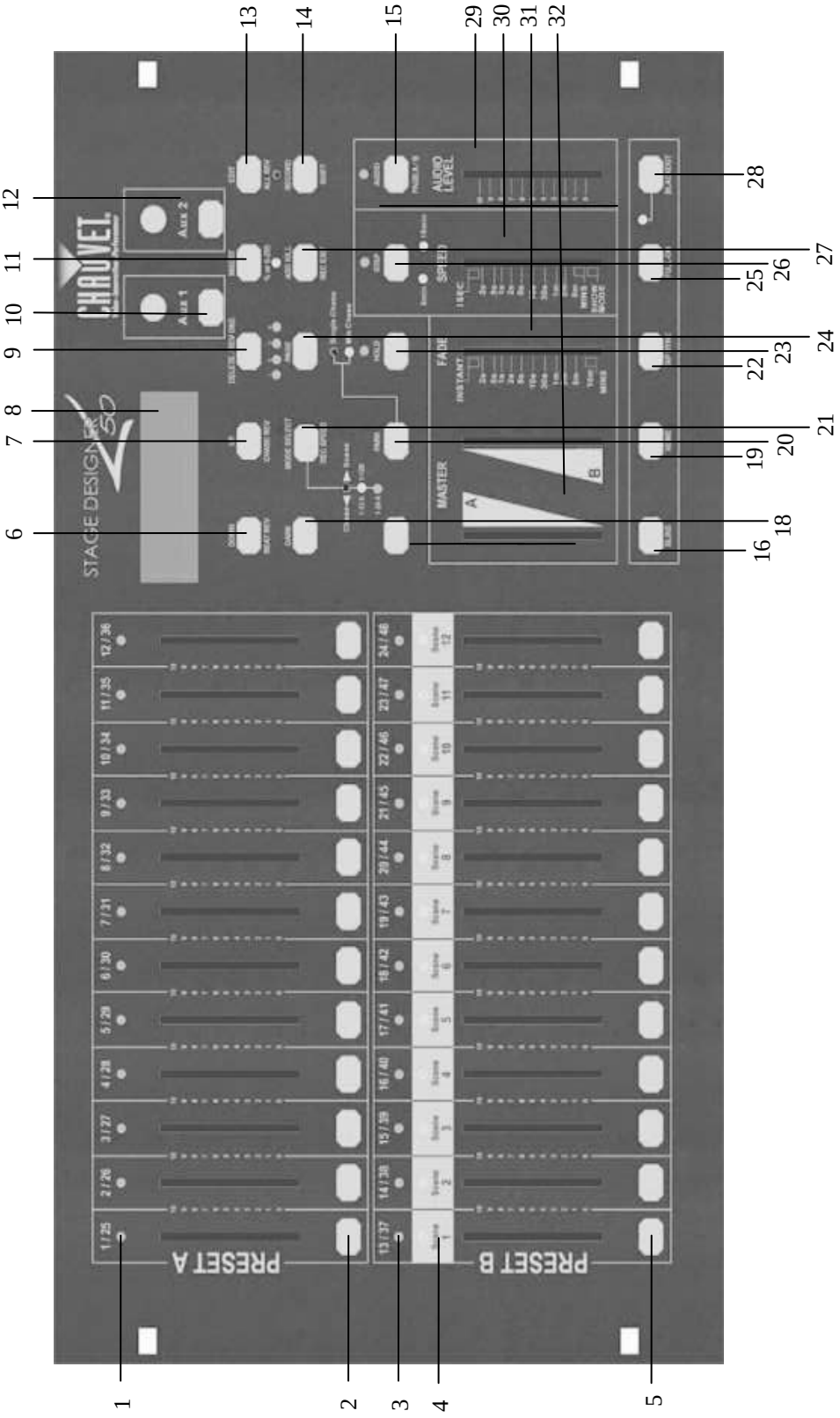
2. INTRODUCTION

The Stage Designer 50™ is a universal intelligent lighting controller. It allows the control of 48 channels with 96 scene/chase playback faders. Each scene/chase can contain up to 1000 individual steps, or looks. On the surface, when in the CHASE◄►SCENE mode, there are 12 physical faders for the playback of the saved programs. There are 4 pages of Scenes playback on Page A, and an additional 4 pages of playback faders on Page B. Programs can be triggered by music, midi, automatically or manually. Channel assignments can be reprogrammed for ease of controlling different fixtures. On the surface you will find various programming tools such as 24 channels fader, A/B master faders for cross mixing, and Fade and Speed time faders for on the fly adjustments. And it also has an LED display for easy navigation of controls and menu functions.

Features

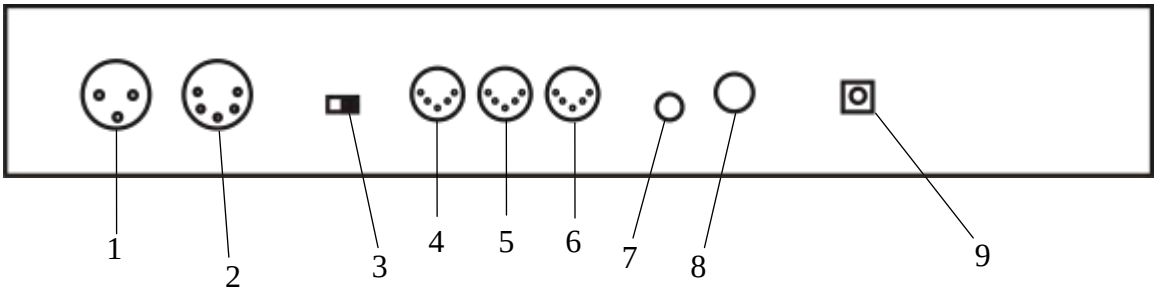
- Universal DMX-512 controller
- Controls up to 48 DMX channels
- 8 pages of 12 playbacks faders,
- 6 sets of chases containing 240 scenes
- Program fade and speed time into each step
- Reversible sliders
- Re-assignable channels
- Sequential linking of chases
- Assignable joystick
- Fog & strobe control buttons
- Grab any fixture on the fly
- Beat activation, tap-sync and auto run
- Polarity selector
- 6 space (6U) 19" rack mount
- MIDI compatible

Product Overview (front)



Item	Button or Fader	Function
1	Channel Faders	Indicates channels 1-12(25-36)
2	Channel Flash button	Brings the relevant fader to 100% or DMX value of 255
3	Channel Faders	Indicates channels 13-24(37-48)
4	Scene Playback indicators	Indicates that the scene is playing back
5	Channel Flash button	Brings the relevant fader to 100% or DMX value of 255
6	Down/Beat Rev	Down functions to modify a scene in Edit mode, Beat Rev is used to reverse the chasing direction of a program with regular beat
7	Up/Chase Reverse	Up function to modify a scene in Edit mode, Chase Reverse is used to reverse the chasing direction of a program under Speed Slider control.
8	LCD Display	Shows the current activity or programming state
9	Delete/Rev One	Delete a step in a scene or reverse he chasing direction of any program
10	Aux 1	Patchable; used to control a channel in 1 of 2 modes of operation
11	Insert/%or255	Insert is to add 1 step or steps into a scene; %or255 is used to change the display value cycle between % and 0-255
12	Aux 2	Patchable; used to control a channel in 1 of 2 modes of operation
13	Edit/All Rev	Edit is used to activate Edit mode; All Rev is to reverse the chasing direction of all programs
14	Record/Shift	Record is used to activate Record mode or program a step; Shift functions the alternate function of other buttons only
15	Audio/Page A_B	Audio activate audio sync of chase; Page A_B switches the channel faders BETWEEN 1-24 MODE AND 25-48 MODE. Press and hold Record & Page A_B to switch between the 2 channel pages.
16	Blind	Takes the channel out of a program temporarily in Chase◄► Scene mode
18	Dark	Used to temporarily blackout overall output
19	Home	Used to deactivate the Blind on a given channel
20	Park	Used to select Single/Mix Chase, bring Channel 13-24(37-48) to full of current setting, or momentarily program a scene into Master B slider depending on the current mode.
21	Mode Select/Rec Speed	Used to activate the operating mode; Rec Speed sets the speed of any programs chasing in Mix mode
22	Tap Sync	Repeatedly tapping this button will establish the chase speed
23	Hold	Used to momentarily maintain current scene
24	Page	Tap to select pages of scenes from 1-4(Page A) and 1-4 (Page B)
25	Full On	Momentarily bring all channels (1-48) to full intensity
26	Step	Used to go to the next step when the Speed slider is set in Show Mode or in Edit mode.
27	Add Kill/Rec exit	In Add mode, multiple scenes or Flash buttons will be on at the same time; In Kill mode, pressing any Flash button will kill any other scenes or programs; Rec Exit is used to exit from Program or Edit mode.
28	Blackout	Used to kill all output, with exception of Full On.
29	Audio Level Fader	Adjusts the audio sensitivity when in Audio trigger mode of scenes
30	Speed Fader	Used to adjust the sped of scenes/chases running
31	Fade Fader	Adjusts the fade-in, fade-out, and cross-fade times
32	Master A_B	Adjusts overall intensity

Product Overview (rear panel)



Item	Button or Fader	Function
1	3-pin DMX output connector	DMX control signal
2	5-pin DMX output connector	DMX control signal
3	Polarity switch	Used to select DMX polarity
4	MIDI Thru	MIDI port for connecting to a sequencer or MIDI device
5	MIDI Out	MIDI port for connecting to a sequencer or MIDI device
6	MIDI In	MIDI port for connecting to a sequencer or MIDI device
7	Audio Input	This jack accepts a line level audio input signal ranging from 100mV to 1Vpp
8	Remote Input	Blackout and Full On may be controlled by a remote control using a standard ¼˝jack
9	DC Input	DC 12-20V, 500mAMin.

Common Terms

The following are common terms used in intelligent light programming.

- **Blackout** is a state where all lighting fixtures' light output are set to 0 or off, usually on a temporary basis.
- **DMX-512** is an industry standard digital communication protocol used in entertainment lighting equipment. For more information read Sections "DMX Primer" and "DMX Control Mode" in the Appendix.
- **Fixture** refers to your lighting instrument or other device such as a fogger or dimmer which you can control.
- **Programs** are a number of scenes arranged one after another. It can be programmed as either a single scene or multiple scenes in sequence.
- **Scenes** are static lighting states.
- **Sliders** are also known as faders.
- **Chases** can also be called programs. A chase consists of a number of scenes arranged one after another.
- **Scanner** refers to a lighting instrument with a pan and tilt mirror; however DMX controllers can use this term to control any DMX-512 compatible device as a generic fixture.
- **MIDI** is a standard for representing musical information in a digital format. A MIDI input would provide external triggering of scenes using midi devices such as a midi keyboard.
- **Stand Alone** refers to a fixture's ability to function independently of an external controller and usually in sync to music, due to a built in microphone.
- **Fade** slider is used to adjust the fade time between scenes within a chase.
- **Speed** slider affects the amount of time a scene will hold its state. It is also considered a wait time.
- **Shutter** is a mechanical device in the lighting fixture that allows you to block the lights path. It is often used to lessen the intensity of the light output and to strobe.
- **Patching** refers to the process of assigning faders to a DMX channel within a fixture.
- **Playbacks** can be either scenes or chases that are directly called to execution by the user. A playback can also be considered program memory that can be recalled during a show.

3. OPERATING INSTRUCTIONS

Setup

SETTING UP THE SYSTEM

1) Place the Stage Designer 50™ on a level surface. Note! The Stage Designer 50™can also be rack mounted, occupying six rack spaces (6U).
2) Plug the AC to DC power supply into the system back panel and into the mains outlet.
3) Plug in your DMX cable(s) to your intelligent lighting as described in the respective fixture's manual. For a quick overview of DMX see the "DMX Primer" on page 19.
4) Reset the system using the instructions on page 11 under **ERASE ALL SCENES**..

PHYSICAL FADER ASSIGNMENT (OPTIONAL SETUP)

Use this feature to combine or unify fixture control attributes for different fixtures. For example; if you were controlling 4 moving mirrors and 4 moving yokes, the color, gobo and dimmer channels may not line up ideally on the physical faders. Use this function to re-assign the dimmer, color and gobo channels to faders 1, 2 and 3. From now on you will be able to control the same attributes on all fixtures using the same fader location. This is also most useful when needing to combine all colors together.

Action

1. Press and hold **RECORD** button.
2. While holding the Record button, press the Flash button #6 (3) times.
3. Press the Flash button that you wish to assign the DMX channel output to.
4. While holding Record, press the Flash button corresponding to the DMX output that you wish to assign the Fader to.
5. Repeat steps 2 ~ 3 as often as necessary.
6. Press and hold Record & Rec Exit to exit the mode.

For example: you wish to assign Fader #1 to output to DMX channel #5.

1. *Hold the Record button & press Fader#6 (3) times.*
2. *Press the Flash button #1.*
3. *While holding the Record button, press the Flash button #5.*

Notes

All physical faders can be re-assigned to output on a different DMX channel. Faders are given a channel number and are labeled on the surface of the controller as such.

You can check to see what the assignment is by pressing the Fader button of the corresponding channel while in this mode.

Here is no limit to the amount of channels that can be assigned to a single fades. One can assign up to all 48 channels of DMX output to a single Fader.

CHNO corresponds to the Physical Fader, while SLDNO corresponds to the DMX output channel.

SWITCHING BETWEEN PAGE AND PAGE B (CHANNELS 1-24 AND 25-48)

Action

1) Press and hold **Record** & press **Page A_B** button. If you are on Page A, then this will bring you to Page B. If you are on Page B, then this will bring you to Page A.

Notes

When the fixture turns on, it will revert to the previously used page.

***Page A** is used to control channels 1-24, while **Page B** is used to control channels 25-48.*

The screen will display which current page.

*There's an additional set of 4 pages of playback controls on **Page B**.*

4. PROGRAMMING

ENTERING PROGRAM MODE (RECORD ENABLE)

1. While holding the **RECORD** button, tap the Flash buttons 1-5-6-8 in sequence.
2. Release the RECORD button. The Record LED lights up;

CREATE A SCENE

A scene is a static lighting state. Scenes are stored in the temporary memory, until they are transferred to one of the playback faders. You may create a single scene or a succession of up to 999 steps per Scene.

Action

1) **Record** enable.
2) Select the 1-24 Single mode by tapping the **Mode Select** button. This will give you control of all 24 channels of the first page.
3) Compose a look by moving the **FADERS**. (Changes in fixture attribute such as colors and gobos, or simply dimmer values).
4) Press **Record** to save the look into the temporary memory.
5) Repeat steps 2 ~ 4 until you have your desired scene.
6) Adjust the **Speed** and **Fade** sliders to achieve the desired amount of time a scene will be held in a chase (speed) and the amount of time allowed for the fixtures to move from one scene to the next (fade).
7) Select a Scene master to store your scene. Tap the Page button to select a page (1-4).
8) Press and hold the Record button & tap the Flash button for the scene that you wish to store it to. All LEDs will flash indicating the scene has been programmed into memory.
9) You can continue programming or exit. To exit program mode, press and hold the Record button & tap the Rec Exit button.

Notes

*Deselect **Blackout** if LED is lit.*

*Be sure that you are on the right page by viewing the screen where it displays **Page A** or **Page B**. This will enable 1-24 or 25-48 channel control.*

If you just wish to create a static look, then you must create a scene composed of only 1 step.

There are 1000 steps available in every scene.

EDIT ENABLE

Action

1) Record enable.
2) Use the **Page** button to select the page the program you wish to edit is on.
3) Tap the Mode Select button to select **Chase◄►Scenes**.
4) Press and hold the **Edit** button & tap the **Flash button** (13-24) of the **Scene** you wish to edit.
5) Release the **Edit** button. The relevant **Scene** Led should light, indicating you are in **Edit** mode.

Notes

*When the **EDIT** mode is entered properly, the display will read **EDITING**.*

This mode is displayed here for only the initiation of EDIT mode. Please see the following sections on the uses of this mode in detail.

ERASE A PROGRAM

Action

1) Record enable.
2) Use the **Page** button to select the page the **Scene** you wish to erase is on.
3) Press and hold the **Edit** button & tap the Flash button (13-24) twice of the Scene you wish to erase.
4) Release the 2 buttons. The LED for the corresponding program should light, indicating that it has been selected.
5) Press the **Delete** button. All LEDs should light, indicating the program is erased.

Notes

ERASE ALL SCENES

Action

1) Record enable
6) Press and hold **RECORD**.
2) While holding Record button, tap the flash buttons in the following sequence: 1-3-2-3. Release the Record button.
7) All LEDs should light, indicating all programs have been erased.
8) Press and hold **RECORD** & **REC EXIT** to exit the mode.

Notes

You must be in Record mode to Reset the controller.

The LED over the Record button will light, indicating the Record mode operation.

Warning: this will reset the controller to its factory defaults. This will erase all programs and settings.

RECORD CLEAR

Action

1) Record enable.
2) Record a scene with 1 or more steps.
3) If you are not satisfied with the scene, you may press and hold the **Record** button & tap the **Page/REC CLR** button. All LEDs will flash, indicating the scenes have been cleared.

Notes

All scenes stored in the temporary memory of the controller will be erased by this process.

This process will not affect the scenes already programmed into a Scene fader.

DELETE A STEP OR STEPS

Action

1) Enter the **EDIT** mode.
2) Tap the **Step** button to scroll to the step you wish to delete.
3) Tap the **Delete** button when you reach the step you wish to delete. All LEDs will light, indicating the deletion of the step.
4) Repeat steps 2 and 3 until all of the unwanted steps have been deleted.
5) Press and hold the **Record** & **Rec Exit** button. The **Scene** button LED will turn off, indicating that the Edit mode has been exited.

Notes

INSERT A STEP OR STEPS

Action

1) Record a scene or scenes you wish to insert.
2) Be sure you are in **Chase◄►Scene** and enter the **EDIT** mode.
3) Tap the **Step** button to scroll to the step which you wish to insert the step before. You may read the step from the display.
4) Tap the **Insert** button to insert the step you've created before.
5) Exit **EDIT** mode.

Notes

Part of entering the Edit mode is selecting which scene you wish to Edit. See section on Edit enable for further instructions.

All LEDs will flash to indicate a successful Insert of the step.

MODIFY A STEP OR STEPS

Action

1) Enter **EDIT** mode.
2) Press and hold the **Up** button if you want to raise the intensity. Press the **Down** button if you want to lower the intensity.
3) Tap the **Step** button to scroll to the step which you wish to insert the step before. You may read the step from the display.
4) While holding the **Up** or **Down** button, tap the **Flash** button corresponding to the DMX channel of the **Scene** you wish to modify until you reach the desired intensity value read from the display. Then, you may tap the **Flash** buttons until you are satisfied with the new **Scene**.
5) Repeat steps 2, 3, and 4 until all the steps have been modified.
6) Exit **EDIT** mode.

Notes

Part of entering the Edit mode is selecting which scene you wish to Edit. See section on Edit enable for further instructions.

All LEDs will flash to indicate a successful Insert of the step.

5. Playback

This controller uses the Channel Faders and Channel Flash buttons for multiple uses. In this occurrence, Channel Faders 13-24 (37-48) are used for the playing back of Scenes already recorded. This is only when the controller is in the **Chase◄►Scene** mode. In this instance, **Master Fader A** will control the manual fader controls, while **Master Fader B** will control the Scenes being played back.

PLAYING A SCENE

A Scene can contain 1,000 steps. The term steps and scenes are used interchangeably.

Action

1) Tap the Mode Select button to select **Chase◄►Scene** mode**.**
2) Tap the **Page** button to select the correct page the program you wish to run is located.
3) Push master Slider B to its maximum position (fully down).
4) Move the desired **Channel** slider (13-24) to its maximum, and the **Scene** will fade in depending upon current fade time.
5) Move the channel slider to adjust the output of the current program.

Notes

*The current mode is indicated by the 3 LEDs. Red is the **Chase◄►Scene**. Yellow is **2-scene preset A/B**. And, Green is **1-24** single mode.*

*You may press and hold down the relevant **Flash** button for the **Scene** to trigger the button momentarily.*

PLAYING A SCENE TO AUDIOTRIGGERING

Action

1) Select your **Scene** as described in the above section.
2) Tap the **Audio** button until its LED lights, indicating **AUDIO** mode is active.
3) Use the **Audio Level** slider to adjust the sensitivity.
4) To return to normal mode, tap the **Audio** button a second time, causing its LED to go out. **AUDIO** mode is disengaged.

Notes

*This is the process of using the built-in microphone, or using the audio jack located on the rear of the controller to use an alternative audio source for triggering of the **Scenes**.*

PLAYING A SCENE WITH THE SPEED SLIDER

Action

1) Select your Scene as described in the above sections.
2) Move the Speed slider to SHOW MODE position (fully down).
3) Press and hold the Rec Speed button & tap the corresponding Flash button (13-24). The Scene tapped will no longer run with the standard beat.
4) Now, you may move the Speed slider to select your desired speed.

Notes

*Be sure **AUDIO** mode is disengaged.*

*Step #3 is not necessary if the selected **Scene** is not recorded with the **Standard** beat.*

PLAYING A SCENE WITH THE STANDARD BEAT

Action

1) Tap the Mode select button to select Chase◄►Scene mode.
2) Tap the Park button to select Mix Chase mode. The LED lights, indicating the selection.
3) Select your Scene as described in the previous sections.
4) Move the Speed slider until the display reads your desired value.
5) Press and hold Rec Speed button & tap the Flash button (13-24) to store the Scene. The Scene will now run with the set time or beat when engaged.
6) Repeat steps 4 & 5 to set a new beat time.

Notes

*Be sure **AUDIO** mode is disengaged.*

As an alternative to using the Speed slider to input the speed, you may use the Tapsync button (2) times to define your beat.

CHANGE THE SPEED MODE BETWEEN 5 & 10 MINUTES

Action

1) Press and hold the Record button.
2) Tap the Flash button 5 or 10 () times while holding down the Record button.
3) The 5min or 10min Led should light, indicating the Speed the slider is set to run.

Notes

AUXILIARY CONTROLS

This is the process of assigning the Auxiliary controls. These will act as shortcuts and are most commonly used for DMX strobe lights or DMX fog machines. However, they are not limited to these functions, such as Pan/tilt control-very useful for remote followspot controls.

Action

1) Press & hold RECORD & tap the Flash button 7 or 8 (3) times. The display should indicate activation of the mode.
2) There are 3 functions. **FUNC 1** states that the Auxiliary control is not assigned to any channel. **FUNC 2** refers o the auxiliary controls working much like the channel fader along with the flash buttons. **FUNC 3** is somewhat different. The rotary knob acts to set the total output of the flash button below it.
3) While holding down the **RECORD** button, select the function you wish for the auxiliary control by pressing **Flash** button 1, 2, or 3. Release the buttons.
4) To assign the auxiliary to a channel, press the **Flash** button for the channel you wish to assign the auxiliary control to. This sets the channel assignment. The corresponding Led above the channel will light, indicating that the channel has ben assigned.
5) Record exit.

Notes

You may refer to the display for the functions being edited.

*Press 7 (3) times for **AUX 1** patching, and 8 (3) times for **AUX 2** patching.*

*While assigning an auxiliary to **mode 2**, the Fader for that channel will not function. It will act as moving the channel.*

*While assigning an auxiliary to **mode 3**, the channel fader and the auxiliary controls will both work for that channel on an **HTP** (highest takes precedent) operating principle.*

Midi Operation

The controller will only respond to MIDI commands on the MIDI channel that it is assigned to. All MIDI control is performed using Note on commands. All other MIDI instructions are ignored. To stop a chase, send the **blackout on** note.

Setting MIDI IN

Action

1) While holding down the **RECORD** button, simultaneously tap Flash button #1 three times. The display reads MIDI CHANNEL IN to indicate channel setup is available.
2) Select the MIDI control channel (1~16) by tapping Flash buttons 1~16. The relevant channel LED lights indicating MIDI IN channel is set.
3) While holding down **RECORD**, tap the **REC EXIT** button to exit MIDI setting.

Notes

This is the Channel that the controller will receive MIDI note commands.

MIDI NOTE	FUNCTION (TURN ON/OFF)
27-69	Turn on or off program 1-48
70-93	Activate Channel 1-24
94	FULL-ON
95	DARK (momentary blackout)
96	HOLD
97	Turn on or off AUDIO
98	MODE: CHASE◄► SCENE
99	MODE: 1-12A_1-12B
100	MODE: 1-24A
101	Step
102	BLACKOUT

- ***Note: When working with MIDI notes 22-93, you may simulate a fader's increase and decrease by adjusting the velocity of the note.***

Setting MIDI OUT

Action	Notes
4) While holding down the **RECORD** button, simultaneously tap Flash button #2 three times. The display reads MIDI CHANNEL OUT to indicate channel setup is available.	
5) Select the MIDI control channel (1~16) by tapping Flash buttons 1~16. The relevant channel LED lights indicating MIDI OUT channel is set.	*This is the Channel that the controller will transmit MIDI note commands.*
6) While holding down **RECORD**, tap the **REC EXIT** button to exit MIDI setting.	

Receiving MIDI File Dump

Action	Notes
7) While holding down the **RECORD** button, simultaneously tap Flash button #3 three times. The display reads MIDI FILEDUMP RECVING 000% when the device is in the correct mode.	*This is the process of copying your entire show to another TFX-48B. This will not work with any other device.*
8) While holding down **RECORD**, tap the **REC EXIT** button to exit MIDI setting.	*This process can take several minutes to complete.* *The controller will automatically begin sending the FILE DUMP once the mode has been selected. Therefore, be sure that the other device has previously been setup to receive the transfer.* *During FILE DUMP, all other operations will cease to function.* *If errors or power failure occurs, FILE DUMP will be interrupted and stop.*

Sending MIDI File Dump

Action	Notes
9) While holding down the **RECORD** button, simultaneously tap Flash button #4 three times. The display reads MIDI FILEDUMP SENDING 000% when the device is in the correct mode.	*This is the process of copying your entire show to another TFX-48B. This will not work with any other device.*
10) While holding down **RECORD**, tap the **REC EXIT** button to exit MIDI setting.	*This process can take several minutes to complete.* *The controller will automatically begin sending the FILE DUMP once the mode has been selected. Therefore, be sure that the other device has previously been setup to receive the transfer.* *During FILE DUMP, all other operations will cease to function.* *If errors or power failure occurs, FILE DUMP will be interrupted and stop.*

6. APPENDIX

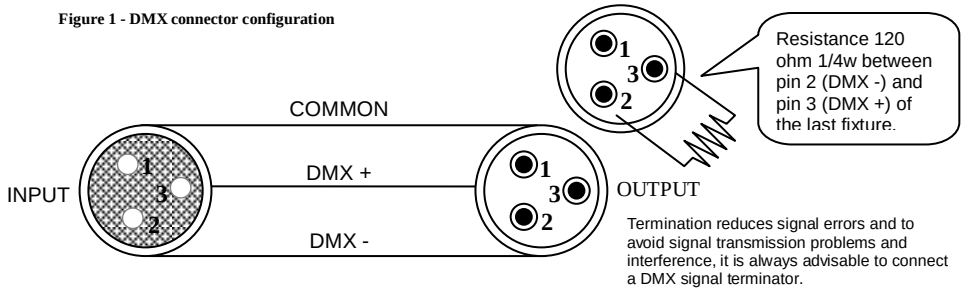
DMX Primer

There are 512 channels in a DMX-512 connection. Channels may be assigned in any manner. A fixture capable of receiving DMX 512 will require one or a number of sequential channels. The user must assign a starting address on the fixture that indicates the first channel reserved in the controller. There are many different types of DMX controllable fixtures and they all may vary in the total number of channels required. Choosing a start address should be planned in advance. Channels should never overlap. If they do, this will result in erratic operation of the fixtures whose starting address is set incorrectly. You can however, control multiple fixtures of the same type using the same starting address as long as the intended result is that of unison movement or operation. In other words, the fixtures will be slaved together and all respond exactly the same.

DMX fixtures are designed to receive data through a serial Daisy Chain. A Daisy Chain connection is where the DATA OUT of one fixture connects to the DATA IN of the next fixture. The order in which the fixtures are connected is not important and has no effect on how a controller communicates to each fixture. Use an order that provides for the easiest and most direct cabling. Connect fixtures using shielded two conductor twisted pair cable with three pin XLR male to female connectors. The shield connection is pin 1, while pin 2 is Data Negative (S-) and pin 3 is Data positive (S+). CHAUVET carries 3-pin DMX compliant cables, DMX-10 (33'), DMX-4.5 (15') and DMX-1.5 (5')

FIXTURE LINKING

Figure 1 - DMX connector configuration


1
3
2
Resistance 120 ohm 1/4w between pin 2 (DMX -) and pin 3 (DMX +) of the last fixture.
COMMON
INPUT
DMX +
DMX -
OUTPUT
Termination reduces signal errors and to avoid signal transmission problems and interference, it is always advisable to connect a DMX signal terminator.

Note! ***If you use a controller with a 5 pin DMX output connector, you will need to use a 5 pin to 3 pin adapter. Chauvet Model No: DMX5M.***
The chart below details a proper cable conversion:

3 PIN TO 5 PIN CONVERSION CHART

CONDUCTOR	3 Pin Female (output)	5 Pin Male (Input)
GROUND/SHIELD	Pin 1	Pin 1
DATA (-)SIGNAL	Pin 2	Pin 2
DATA (+) SIGNAL	Pin 3	Pin 3
DO NOT USE		Do not use
DO NOT USE		Do not use

Returns Procedure

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Authorization Number (RA #). Products returned without an RA # will be refused. Call CHAUVET and request an RA # prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. CHAUVET reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

Note: If you are given an RA #, please include the following information on a piece of paper inside the box:

1) Your name
2) Your address
3) Your phone number
4) A brief description of the symptoms

Claims

Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise. It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Any other claim for items such as missing component/part, damage not related to shipping, and concealed damage, must be made within seven (7) days of receiving merchandise.

Troubleshooting

Please refer to the troubleshooting chart on the following page. If you still have a problem after trying those solutions, please contact CHAUVET Technical Support at (954) 929-1115.

General Troubleshooting

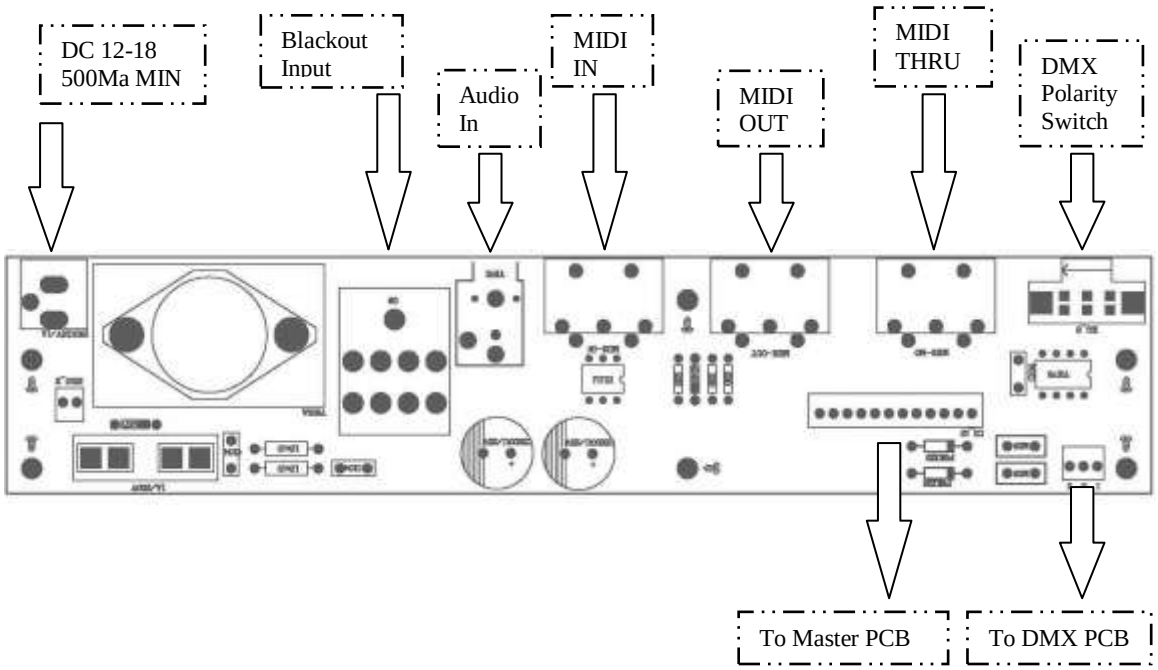
Symptom	Solution(s)	Applies to			
		Lights	Foggers & Snow	Controllers	Dimmers& Chaser
Auto shut off	Check fan thermal switch reset	✓			
Beam is very dim or not bright	Clean optical system or replace lamp Check 220/110v switch for proper setting	✓			
Breaker/Fuse keeps blowing	Check total load placed on device				✓
Chase is too slow	Check users manual for speed adjustment	✓		✓	✓
Device has no power	Check for power on Mains. Check device's fuse. (internal and/or external)	✓		✓	✓
Fixture is not responding	Check DMX Dip switch settings for correct addressing Check DMX cables Check polarity switch settings	✓			
Fixture is on but there is no movement to the audio	Make sure you have the correct audio mode on the control switches. If audio provided via ¼" jack, make sure a live audio signal exists Adjust sound sensitivity knob	✓		✓	✓
Lamps cuts off sporadically	Possible bad lamp or fixture is overheating. Lamp may be at end of its life.	✓			
Light will not come on after power failure	Some discharge lamps require a cooling off period before the electronics in the fixture can kick start it again, wait 5 to 10 minutes before powering up	✓			
Loss of signal	Use only DMX cables Install terminator Note: Keep DMX cables separated from power cables or black lights.	✓	✓	✓	✓
Moves slow	Check 220/110v switch for proper setting	✓			
No flash	Re-install bulb, may have shifted in shipping	✓			
No laser output	Bounce mirror motor may have shifted during shipping, readjust	✓			
No light output	Check slip ring & brushes for contact Install bulb Call service technician	✓			
Relay will not work	Check reset switch Check cable connections				✓
Remote does not work	Make sure connector is firmly connected to device	✓	✓		
Stand alone mode	All Chauvet lighting fixtures featuring stand-alone functions do not require additional settings, simply power the fixture and it will automatically enter into this mode	✓			

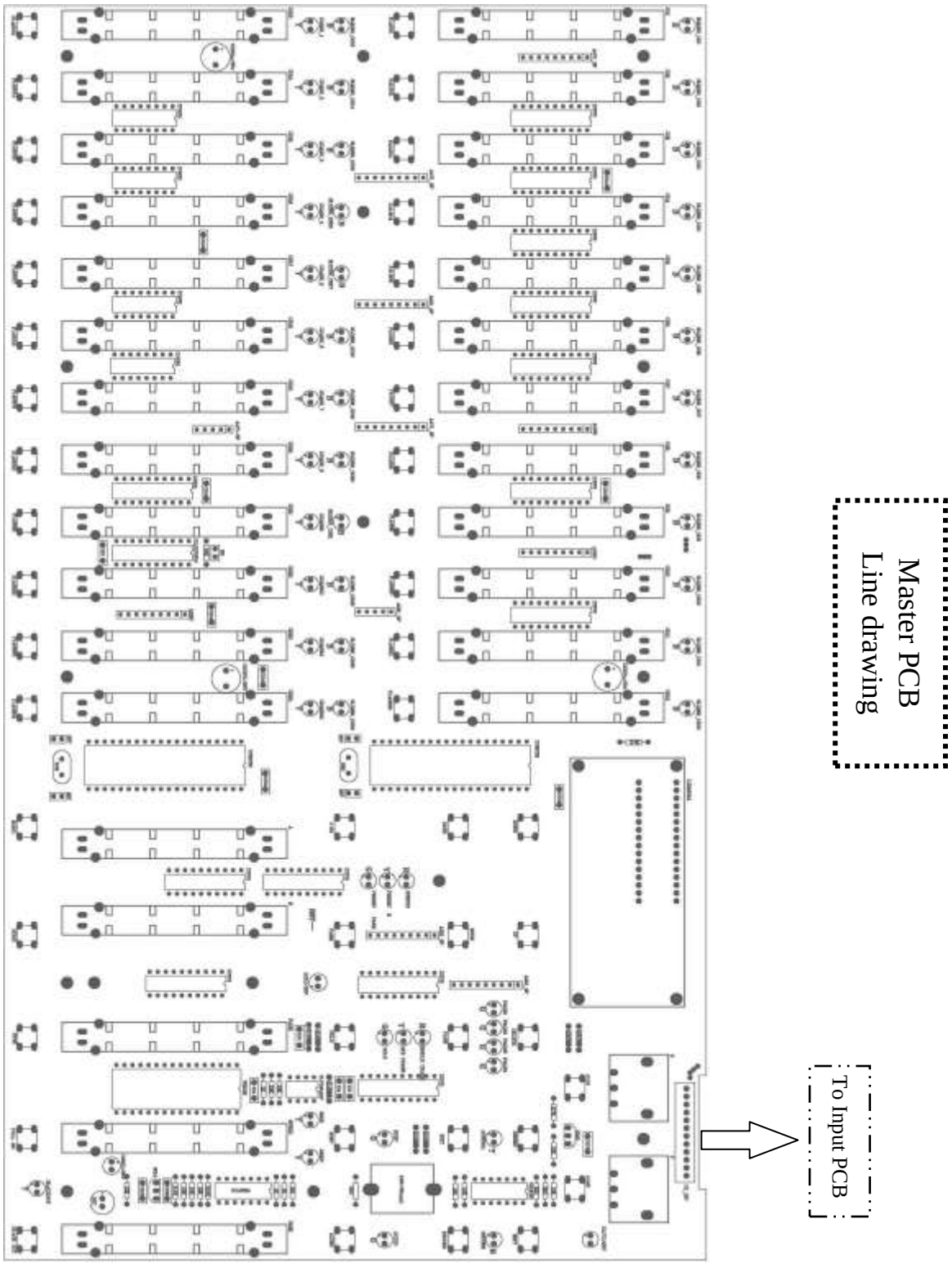
DMX Dipswitch Quick Reference Chart

DMX Address Quick Reference Chart																					
Dip Switch Position																					
DMX DIP SWITCH SET					#9	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1
0=OFF					#8	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
1=ON					#7	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1
X=OFF or ON					#6	0	1	0	1	0	1	0	1	0	1	0	1	0	1	0	1
#1	#2	#3	#4	#5																	
0	0	0	0	0			32	64	96	128	160	192	224	256	288	320	352	384	416	448	480
1	0	0	0	0		1	33	65	97	129	161	193	225	257	289	321	353	385	417	449	481
0	1	0	0	0		2	34	66	98	130	162	194	226	258	290	322	354	386	418	450	482
1	1	0	0	0		3	35	67	99	131	163	195	227	259	291	323	355	387	419	451	483
0	0	1	0	0		4	36	68	100	132	164	196	228	260	292	324	356	388	420	452	484
1	0	1	0	0		5	37	69	101	133	165	197	229	261	293	325	357	389	421	453	485
0	1	1	0	0		6	38	70	102	134	166	198	230	262	294	326	358	390	422	454	486
1	1	1	0	0		7	39	71	103	135	167	199	231	263	295	327	359	391	423	455	487
0	0	0	1	0		8	40	72	104	136	168	200	232	264	296	328	360	392	424	456	488
1	0	0	1	0		9	41	73	105	137	169	201	233	265	297	329	361	393	425	457	489
0	1	0	1	0		10	42	74	106	138	170	202	234	266	298	330	362	394	426	458	490
1	1	0	1	0		11	43	75	107	139	171	203	235	267	299	331	363	395	427	459	491
0	0	1	1	0		12	44	76	108	140	172	204	236	268	300	332	364	396	428	460	492
1	0	1	1	0		13	45	77	109	141	173	205	237	269	301	333	365	397	429	461	493
0	1	1	1	0		14	46	78	110	142	174	206	238	270	302	334	366	398	430	462	494
1	1	1	1	0		15	47	79	111	143	175	207	239	271	303	335	367	399	431	463	495
0	0	0	0	1		16	48	80	112	144	176	208	240	272	304	336	368	400	432	464	496
1	0	0	0	1		17	49	81	113	145	177	209	241	273	305	337	369	401	433	465	497
0	1	0	0	1		18	50	82	114	146	178	210	242	274	306	338	370	402	434	466	498
1	1	0	0	1		19	51	83	115	147	179	211	243	275	307	339	371	403	435	467	499
0	0	1	0	1		20	52	84	116	148	180	212	244	276	308	340	372	404	436	468	500
1	0	1	0	1		21	53	85	117	149	181	213	245	277	309	341	373	405	437	469	501
0	1	1	0	1		22	54	86	118	150	182	214	246	278	310	342	374	406	438	470	502
1	1	1	0	1		23	55	87	119	151	183	215	247	279	311	343	375	407	439	471	503
0	0	0	1	1		24	56	88	120	152	184	216	248	280	312	344	376	408	440	472	504
1	0	0	1	1		25	57	89	121	153	185	217	249	281	313	345	377	409	441	473	505
0	1	0	1	1		26	58	90	122	154	186	218	250	282	314	346	378	410	442	474	506
1	1	0	1	1		27	59	91	123	155	187	219	251	283	315	347	379	411	443	475	507
0	0	1	1	1		28	60	92	124	156	188	220	252	284	316	348	380	412	444	476	508
1	0	1	1	1		29	61	93	125	157	189	221	253	285	317	349	381	413	445	477	509
0	1	1	1	1		30	62	94	126	158	190	222	254	286	318	350	382	414	446	478	510
1	1	1	1	1		31	63	95	127	159	191	223	255	287	319	351	383	415	447	479	511

Dip Switch Position DMX Address

Input PCB
Line drawing




Master PCB
Line drawing
To Input PCB

Technical Specifications

WEIGHT & DIMENSIONS

Length	19 in (483 mm)
Width	10.5 in (267 mm)
Height	3.5 in (89 mm)
Weight	10.3 lbs (4.7 kg)

POWER

Operating Range	DC 12V-18V 500mA 100-240v autoswitching
Adapter	2-pin Edison
Internal fuse	F0.5A 250V

THERMAL

Maximum ambient temperature	104° F (40°C)

CONTROL & PROGRAMMING

3-pin DMX:

Data output	locking 3-pin XLR female socket
Data pin configuration	pin 1 shield, pin 2 (-), pin 3 (+)
Protocols	DMX-512 USITT

5-pin DMX:

Data output	locking 5-pin XLR female socket
Data pin configuration	pin 1 shield, pin 2 (-), pin 3 (+), pins 4+5 (not used)
Protocols	DMX-512 USITT

ORDERING INFORMATION

Stage Designer™ 50	TFX-48B